

SYSTEMS AND METHODS FOR CARDIAC ARREST PROTOCOL COMPLIANCE

BACKGROUND OF THE INVENTION

[0001] This invention relates generally to the medical field. More specifically, the invention relates to the immediate treatment of individuals experiencing a cardiac arrest.

[0002] Cardiac arrest, which is the failure of the heart to continue circulating blood throughout the body, is the cause of about 15% of all deaths in Western countries. If the cardiac arrest occurs outside of a hospital environment, the survival rate of persons experiencing cardiac arrest is usually between 5 to 10%. Even when the cardiac arrests occur in a hospital environment, the survival rate only increases to about 15%. Because those who survive a cardiac arrest often survive for many years following the event, increasing survival rates of cardiac arrests is an important objective in the medical community.

[0003] Studies have found that during a stressful life-or-death cardiac arrest event even well trained emergency medical personnel will often fail to follow proven life-saving procedures in the heat of the moment. When emergency medical personnel follow proper cardiac arrest protocol, survival rates may increase by 250 to 500%.

[0004] Embodiments of the invention provide solutions to these and other problems related to cardiac arrest protocol compliance.

BRIEF DESCRIPTION OF THE INVENTION

[0005] In one embodiment, a method for treating a person experiencing a cardiac arrest is provided. The method may include providing a kit. The kit may include a first section, a second section, a third section, a fourth section, and a visual medium. The first section may include a ventilation system. The second section may include a drug delivery system. The third section may include a first set of drugs. The fourth section may include a second set of drugs. The visual medium may include a first set of instructions and a second set of instructions. The method may also include accessing the first section of the kit to ventilate the person. The method may further include accessing the second section of the kit to provide for drug delivery to the person. The method may additionally include determining whether the person is experiencing a first cardiac arrest condition or a second cardiac arrest condition. The method may moreover include accessing, selectively, the third section of the kit or the fourth section of the kit, based at least in part upon the determination of whether the person is experiencing the first cardiac arrest condition or the second cardiac arrest condition, to provide either the first set of drugs or the second set of drugs to the person.

[0006] In another embodiment, a kit for treating a person experiencing a cardiac arrest is provided. The kit may include a first section including a ventilation system. The kit may also include a second section including a drug delivery system. The kit may further include a third section including a first set of drugs. The kit may additionally include a fourth section including a second set of drugs. The visual medium may at least partially separate the third section from the fourth section. The visual medium may also include a first set of instructions which has directions to be followed by at least one user for administering the first set of drugs. The visual medium may furthermore include a second set of instructions which has directions to be followed by the at least one user for administering the second set of drugs.

[0007] In another embodiment, a method for organizing a container for assisting in the treatment of a person experiencing a cardiac arrest is provided. The method may include providing a container, where the container has a first section, a second section, a third section, and a fourth section. The method may also include disposing a ventilation system into the first section. The method may further include disposing a drug delivery system into the second section. The method may additionally include disposing a first set of drugs into the third section. The method may moreover include disposing a second set of drugs into the fourth section. The method may also include coupling a movable visual medium having a first set of instructions and a second set of instructions between the third section and the fourth section. The movable visual medium may be coupled such that in a first position the visual medium hides the second set of instructions and at least a portion of the fourth section, and in a second position the visual medium hides the first set of instructions and at least a portion of the third section.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The present invention is described in conjunction with the appended figures:

[0009] FIG. 1 is an axonometric view of an embodiment of a kit of the invention for treating a person experiencing a cardiac arrest;

[0010] FIG. 2 is another axonometric view of the kit embodiment shown in FIG. 1 lying on its side in preparation for use on a person experiencing a cardiac arrest;

[0011] FIG. 3 is an axonometric view of the embodiment shown in FIG. 2, where the kit has been opened to expose the first and second sections of the kit;

[0012] FIG. 4 is an axonometric view of the embodiment shown in FIG. 3, where the kit has been further opened to expose the third section of the kit and a movable visual medium;

[0013] FIG. 5 is an axonometric view of the embodiment shown in FIG. 4, where the movable visual medium is being rotated to reveal the fourth section of the kit;

[0014] FIG. 6 is an axonometric view of the embodiment shown in FIG. 5, where the movable visual medium has been fully rotated to expose the fourth section of the kit;

[0015] FIG. 7A is an example set of instructions for performing treatment of a person experiencing a cardiac arrest and having an asystole condition and/or a pulseless electrical activity condition;

[0016] FIG. 7B is an example set of instructions for performing treatment of a person experiencing a cardiac arrest and having a ventricular fibrillation condition and/or a ventricular tachycardia condition;

[0017] FIG. 8 is a block diagram of a method of the invention for treating a person experiencing a cardiac arrest; and

[0018] FIG. 9 is a block diagram of a method of the invention for organizing a container for assisting in the treatment of a person experiencing a cardiac arrest.

[0019] In the appended figures, similar components and/or features may have the same numerical reference label. Further, various components of the same type may be distinguished by following the reference label by a letter that distinguishes among the similar components and/or features. If only the first numerical reference label is used in the specification, the description is applicable to any one of the similar components and/or features having the same first numerical reference label irrespective of the letter suffix.